

**MOBILE-BASED ACADEMIC COURSE REGISTRATION
SYSTEM IN COLLEGE OF ARTS AND SCIENCES OF
UNIVERSITI UTARA MALAYSIA**

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Universiti Utara Malaysia

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ABSTRACT

Currently academic course registration is available through the Computer Center counter as well as online computer. However, through the counter, this service is only available during office hours. Even though through online computer, users are able to access the services anytime, but they must be connected to the Internet which limits their access to this service. Since the need of course registration increases rapidly during course registration period, an alternative technology is required. Thus, mobile technology has been identified as a potential alternative since it is able to provide the course registration service anytime and anywhere. This paper discusses a prototype of Mobile-based academic course registration system (MBACRS), a facility which has been developed for students to register their academic courses through mobile devices. MBACRS was developed as an alternative channel for registering academic courses through mobile devices. Results of user evaluation on the MBACRS indicate that it has good usability in terms of Usefulness, Ease of Use and Outcome/Future Use. The results also indicate that it is useful for users and it is capable to help them to make their academic course registration easily, directly and successfully regardless of location and time.

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LIST OF ABBRIVATIONS

MBACRS	Mobile-based academic course registration system
WAP	Wireless Application Protocol
PC	Personal Computer
PDA	Personal Digital Assistant
CAS	College of Arts and Sciences
UUM	University Utara Malaysia
ARM	Advanced RISC Machine
SD	Secure Digital
GPRS	General Packet Radio Service
UMTS	Universal Mobile Telephony Service
WLAN	Wireless Local Area Network
Windows CE	Windows Embedded Compact
BREW	Binary Runtime Environment for Wireless
SMS	Short Messages Services
HTML	Hyper Text Markup Language
WML	Wireless Markup Language
XML	Extensible Markup Language
URL	Uniform Resource Locator
WBMP	Wireless bitmap pictures
XHTML MP	eXtensible Hypertext Markup Language Mobile Profile
CSS	Cascading Style Sheet
JSP	JavaServer Pages

JSTL	Standard Tag Library
UM	Universiti Malaya
UPM	Universiti Putra Malaysia
IUM	International Islamic University Malaysia
UiTM	Universiti Teknologi Mara
UUM	Universiti Utara Malaysia
KUIM	Kolej Universiti Islam Malaysia
OUM	Open University Malaysia
UML	Unified Modeling Language
WWW	World Wide Web
GSM	Global System for Mobile Communications
W3C	World Wide Web Consortium

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

New technology offers unprecedented opportunities for modernization throughout our society (Zhiyuan, 2002). The world has seen a revolution of information which is changing the way companies do business and the way students get money of the services they need (Kushchu, 2003). Mobile technology becomes important (Mohamed, 2002) since many people carry their mobile devices with them all the times and anywhere, while most personal computers are connected to a specific location. Meanwhile people are able to access the public services via their mobile devices from everywhere. The number of people who is able to access their mobile phones and mobile internet connection is increasing rapidly (Marsha & Margaret, 2006). As soon mobile access is becoming a natural part of daily life, universities will have to transform the activities to meet this demand efficiency of interactions for all parties. Therefore, many universities are moving towards mobile technology to improve their services. Interaction between students and Wireless Application Protocol (WAP) as a new delivery channel utilizing the available wireless infrastructure installed by private mobile operators.

Mobile application can be range from web sites to software that works together with mobile devices and services to provide seamless interaction between people and information. Mobile application provides considerable benefits (Jussi, 2006). Among

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